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ROBERT VARITZ			RILEY, MARCUS T	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/726,369	Applicant(s) SONG ET AL.	
	Examiner Marcus T. Riley	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/02/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/02/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>attached</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Notredame et al. (US 6,049,390 hereinafter, Notredame '390) in combination with Kita et al. (US 5,021,892 hereinafter, Kita '892).

Regarding claim 1; Notredame '390 discloses a method for providing printing scale control with respect to a digital source image which is associated with a related, validated, data-content flag that describes the actual size of the image in terms of dots-per-inch, and number of bits, comprising: (*"One embodiment disclosed is a method of generating one or more pages for a digital printing press..."* column 5, lines 29-30). See also (*"The CT resolution may be the same or lower than the device resolution... For our implementation for the... printing device which prints at 600 dots per inch (dpi), CT data has a resolution of 300 dpi. CT validity mask: The CT validity mask is a binary mask at CT resolution that flags which CT pixels contain valid data."* column 11, lines 26-33).

Notredame '390 does not expressly disclose examining such a source image to detect the presence of such a flag; and on detecting such a flag, using the information contained in it to control printed image size.

Kita '892 discloses examining such a source image to detect the presence of such a flag (*"At step S45, discrimination of the COPY flag is carried out."* column 11, line 49-50); and on detecting such a flag, using the information contained in it to control printed image size (*"At step S45, discrimination of the COPY flag is carried out. When the COPY flag is ON, the program advances. At steps S46 and S46', the previous scale setting is confirmed by determining whether or not the previous scale setting is A4/A4 and then whether the scale is A4/B5 or not. As understood from the arrangement order of scales in FIG. 2, each depression of the SCALE key 42 changes the scale setting in an order according to the arrangement order. Therefore, if step S46 determines that the previous setting is A4/A4, the scale is set to A4/B5 at step S49. When the previous setting is judged to be A4/B5 at step S46, the scale is set to A4/A5 at step S48. When the previous setting is judged to be neither A4/A4 nor A4/B5 at steps S46 and S46', the scale is set to A4/A4 at step S47. The newly set value is stored in the area 209 of RAM 52 and either one of the lamps 44, 45, and 46 (See FIG. 2), is turned on in response to the set value, and thereafter, the program returns. When operating the START key 43 after setting the above conditions, the program branches to (1-6) of FIG. 8c. At step S50, discrimination of the COPY flag is carried out. When the COPY flag is not ON, the program returns to step S7 of FIG. 6 and prohibits the acceptance of this key. When the COPY flag is ON, the program, from step S51, is carried out based on the I/O setting effected at foregoing step S43. At the step S51, the set value stored in the area 203 for the scanner setting is supplied to the CCD read control portion 54. Then, at step S52, the set value stored in the area 204 for the printer setting is supplied to the mechanism and the record control portion 67 together with the above set value for the scanner."* column 11, lines 49-67 thru column 12, lines 1-9).

Notredame '390 and Kita '892 are combinable because they are from same field of endeavor of image processing devices (*"The present invention generally relates to an image processing device."* Kita '892 at column 1, lines 10-11).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify image processing device as taught by Notredame '390 by adding examining such a source image to detect the presence of such a flag; and on detecting such a flag, using the information contained in it to control printed image size as taught by Kita '892.

The motivation for doing so would have been because it advantageous to keep up with fast digital color printing systems (*"The ability of the method to keep up with fast digital color printing systems is a result of the data remaining essentially compressed..."* Kita '892 at column 5, lines 1-2).

Therefore, it would have been obvious to combine Notredame '390 with Kita '892 to obtain the invention as specified in claim 1.

Regarding claim 2; Notredame '390 discloses a method for providing printing scale control with respect to a digital image described by a data file having a known dots-per-inch characteristic, and a known total number of bits comprising: associating with the image data file a validated data-content flag which describes the image in terms of its dots-per-inch characteristic and its total number of bits (*"One embodiment disclosed is a method of generating one or more pages for a digital printing press..."* column 5, lines 29-30). See also (*"The CT resolution may be the same or lower than the device resolution... For our implementation for the... printing device which prints at 600 dots per inch (dpi), CT data has a resolution of 300*

dpi. CT validity mask: The CT validity mask is a binary mask at CT resolution that flags which CT pixels contain valid data.” column 11, lines 26-33); sending this image data file along with the associated data-content flag en route to a printer (“The CT selection mask resolution in our system is of the same resolution as the LW data, and is encoded as part of the LW RLE data. Each LW data run thus includes a flag to indicate whether the run is CT or LW (this is the CT selection mask part of the LW data). If LW, the run also includes the color value, and whether the LW data is masking, overprinting, etc. A page element normally would contain both LW and CT data, and in such a case, all three data types (CT data, CT validity mask and LW data, which might include an embedded CT selection mask) are stored together as one file. The system designer would design the file structure to enable efficient printing with the particular printing devices to be connected to the system.” column 11, lines 66-67 thru column 12, lines 1-13).

Notredame ‘390 does not expressly disclose where within that route, and upstream from the printer, detecting the presence of the flag; and utilizing the information contained in the flag to control printed image size.

Kita ‘892 discloses where within that route, and upstream from the printer, detecting the presence of the flag (“At step S45, discrimination of the COPY flag is carried out.” column 11, line 49-50); and utilizing the information contained in the flag to control printed image size. (“At step S45, discrimination of the COPY flag is carried out. When the COPY flag is ON, the program advances. At steps S46 and S46', the previous scale setting is confirmed by determining whether or not the previous scale setting is A4/A4 and then whether the scale is A4/B5 or not. As understood from the arrangement order of scales in FIG. 2, each depression of the SCALE key 42 changes the scale setting in an order according to the arrangement order. Therefore, if step

S46 determines that the previous setting is A4/A4, the scale is set to A4/B5 at step S49. When the previous setting is judged to be A4/B5 at step S46, the scale is set to A4/A5 at step S48. When the previous setting is judged to be neither A4/A4 nor A4/B5 at steps S46 and S46', the scale is set to A4/A4 at step S47. The newly set value is stored in the area 209 of RAM 52 and either one of the lamps 44, 45, and 46 (See FIG. 2), is turned on in response to the set value, and thereafter, the program returns. When operating the START key 43 after setting the above conditions, the program branches to (1-6) of FIG. 8c. At step S50, discrimination of the COPY flag is carried out. When the COPY flag is not ON, the program returns to step S7 of FIG. 6 and prohibits the acceptance of this key. When the COPY flag is ON, the program, from step S51, is carried out based on the I/O setting effected at foregoing step S43. At the step S51, the set value stored in the area 203 for the scanner setting is supplied to the CCD read control portion 54. Then, at step S52, the set value stored in the area 204 for the printer setting is supplied to the mechanism and the record control portion 67 together with the above set value for the scanner." column 11, lines 49-67 thru column 12, lines 1-9).

Notredame '390 and Kita '892 are combinable because they are from same field of endeavor of image processing devices ("The present invention generally relates to an image processing device." Kita '892 at column 1, lines 10-11).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify image processing device as taught by Notredame '390 by adding examining such a source image to detect the presence of such a flag; and on detecting such a flag, using the information contained in it to control printed image size as taught by Kita '892.

The motivation for doing so would have been because it advantageous to keep up with fast digital color printing systems (*"The ability of the method to keep up with fast digital color printing systems is a result of the data remaining essentially compressed..."* Kita '892 at column 5, lines 1-2).

Therefore, it would have been obvious to combine Notredame '390 with Kita '892 to obtain the invention as specified in claim 1.

Regarding claim 3; Notredame '390 discloses an apparatus for providing printing scale control with respect to a digital source image which is associated with a related, validated, data-content flag that describes the actual size of the image in terms of dots-per-inch, and number of bits, comprising: (*"One embodiment disclosed is a method of generating one or more pages for a digital printing press..."* column 5, lines 29-30). See also (*"The CT resolution may be the same or lower than the device resolution... For our implementation for the... printing device which prints at 600 dots per inch (dpi), CT data has a resolution of 300 dpi. CT validity mask: The CT validity mask is a binary mask at CT resolution that flags which CT pixels contain valid data."* column 11, lines 26-33).

Notredame '390 does not expressly disclose examining structure for examining such a source image to detect the presence of such a flag; and flag using structure operatively connected to said examining structure and operable, on the examining structure detecting the presence of such a flag, to use the information contained in that flag to control printed image size.

Kita '892 discloses examining structure for examining such a source image to detect the presence of such a flag (*"At step S45, discrimination of the COPY flag is carried out."* column 11, line 49-50); and flag using structure operatively connected to said examining structure and

operable, on the examining structure detecting the presence of such a flag, to use the information contained in that flag to control printed image size (*"At step S45, discrimination of the COPY flag is carried out. When the COPY flag is ON, the program advances. At steps S46 and S46', the previous scale setting is confirmed by determining whether or not the previous scale setting is A4/A4 and then, whether the scale is A4/B5 or not. As understood from the arrangement order of scales in FIG. 2, each depression of the SCALE key 42 changes the scale setting in an order according to the arrangement order. Therefore, if step S46 determines that the previous setting is A4/A4, the scale is set to A4/B5 at step S49. When the previous setting is judged to be A4/B5 at step S46, the scale is set to A4/A5 at step S48. When the previous setting is judged to be neither A4/A4 nor A4/B5 at steps S46 and S46', the scale is set to A4/A4 at step S47. The newly set value is stored in the area 209 of RAM 52 and either one of the lamps 44, 45, and 46 (See FIG. 2), is turned on in response to the set value, and thereafter, the program returns. When operating the START key 43 after setting the above conditions, the program branches to (1-6) of FIG. 8c. At step S50, discrimination of the COPY flag is carried out. When the COPY flag is not ON, the program returns to step S7 of FIG. 6 and prohibits the acceptance of this key. When the COPY flag is ON, the program, from step S51, is carried out based on the I/O setting effected at foregoing step S43. At the step S51, the set value stored in the area 203 for the scanner setting is supplied to the CCD read control portion 54. Then, at step S52, the set value stored in the area 204 for the printer setting is supplied to the mechanism and the record control portion 67 together with the above set value for the scanner."* column 11, lines 49-67 thru column 12, lines 1-9).

Notredame '390 and Kita '892 are combinable because they are from same field of endeavor of image processing devices (*"The present invention generally relates to an image processing device."* Kita '892 at column 1, lines 10-11).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify image processing device as taught by Notredame '390 by adding examining structure for examining such a source image to detect the presence of such a flag; and flag using structure operatively connected to said examining structure and operable, on the examining structure detecting the presence of such a flag, to use the information contained in that flag to control printed image size as taught by Kita '892.

The motivation for doing so would have been because it advantageous to keep up with fast digital color printing systems (*"The ability of the method to keep up with fast digital color printing systems is a result of the data remaining essentially compressed..."* Kita '892 at column 5, lines 1-2).

Therefore, it would have been obvious to combine Notredame '390 with Kita '892 to obtain the invention as specified in claim 1.

Regarding claim 4; Notredame '390 discloses an apparatus for providing printing scale control with respect to a digital image which is described by a data file having a known dots-per-inch characteristic, and known total number of bits, said apparatus comprising: discloses associating structure for associating with such an image data file a validated data-content flag which describes the image in terms of its dot-per-inch characteristic and its total number of bits (*"One embodiment disclosed is a method of generating one or more pages for a digital printing press..."* column 5, lines 29-30). See also (*"The CT resolution may be the same or lower than*

the device resolution... For our implementation for the... printing device which prints at 600 dots per inch (dpi), CT data has a resolution of 300 dpi. CT validity mask: The CT validity mask is a binary mask at CT resolution that flags which CT pixels contain valid data.” column 11, lines 26-33); sending structure operatively associated with said associating structure operable, following the performance of said associating structure, to send the image data file along with the associated data-content flag en route to a printer (“The CT selection mask resolution in our system is of the same resolution as the LW data, and is encoded as part of the LW RLE data. Each LW data run thus includes a flag to indicate whether the run is CT or LW (this is the CT selection mask part of the LW data). If LW, the run also includes the color value, and whether the LW data is masking, overprinting, etc. A page element normally would contain both LW and CT data, and in such a case, all three data types (CT data, CT validity mask and LW data, which might include an embedded CT selection mask) are stored together as one file. The system designer would design the file structure to enable efficient printing with the particular printing devices to be connected to the system.” column 11, lines 66-67 thru column 12, lines 1-13).

Notredame ‘390 does not expressly disclose operatively disposed within that route, and upstream from the printer, detecting apparatus for detecting the presence of the associated flag; and utilizing structure operatively connected to said detecting structure for utilizing the information contained in the flag to control printed image size.

Kita ‘892 discloses operatively disposed within that route, and upstream from the printer, detecting apparatus for detecting the presence of the associated flag; and utilizing structure operatively connected to said detecting structure for utilizing the information contained in the flag to control printed image size.

Kita '892 discloses operatively disposed within that route, and upstream from the printer, detecting apparatus for detecting the presence of the associated flag (*"At step S45, discrimination of the COPY flag is carried out."* column 11, line 49-50); and utilizing structure operatively connected to said detecting structure for utilizing the information contained in the flag to control printed image size (*"At step S45, discrimination of the COPY flag is carried out. When the COPY flag is ON, the program advances. At steps S46 and S46', the previous scale setting is confirmed by determining whether or not the previous scale setting is A4/A4 and then whether the scale is A4/B5 or not. As understood from the arrangement order of scales in FIG. 2, each depression of the SCALE key 42 changes the scale setting in an order according to the arrangement order. Therefore, if step S46 determines that the previous setting is A4/A4, the scale is set to A4/B5 at step S49. When the previous setting is judged to be A4/B5 at step S46, the scale is set to A4/A5 at step S48. When the previous setting is judged to be neither A4/A4 nor A4/B5 at steps S46 and S46', the scale is set to A4/A4 at step S47. The newly set value is stored in the area 209 of RAM 52 and either one of the lamps 44, 45, and 46 (See FIG. 2), is turned on in response to the set value, and thereafter, the program returns. When operating the START key 43 after setting the above conditions, the program branches to (1-6) of FIG. 8c. At step S50, discrimination of the COPY flag is carried out. When the COPY flag is not ON, the program returns to step S7 of FIG. 6 and prohibits the acceptance of this key. When the COPY flag is ON, the program, from step S51, is carried out based on the I/O setting effected at foregoing step S43. At the step S51, the set value stored in the area 203 for the scanner setting is supplied to the CCD read control portion 54. Then, at step S52, the set value stored in the area 204 for the*

printer setting is supplied to the mechanism and the record control portion 67 together with the above set value for the scanner." column 11, lines 49-67 thru column 12, lines 1-9).

Notredame '390 and Kita '892 are combinable because they are from same field of endeavor of image processing devices (*"The present invention generally relates to an image processing device."* Kita '892 at column 1, lines 10-11).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify image processing device as taught by Notredame '390 by adding operatively disposed within that route, and upstream from the printer, detecting apparatus for detecting the presence of the associated flag; and utilizing structure operatively connected to said detecting structure for utilizing the information contained in the flag to control printed image size as taught by Kita '892.

The motivation for doing so would have been because it advantageous to keep up with fast digital color printing systems (*"The ability of the method to keep up with fast digital color printing systems is a result of the data remaining essentially compressed..."* Kita '892 at column 5, lines 1-2).

Therefore, it would have been obvious to combine Notredame '390 with Kita '892 to obtain the invention as specified in claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus T. Riley whose telephone number is 571-270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Marcus T. Riley
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